

# ***Military Transformation in the Asia-Pacific Region***

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## **Overview**

Defense planners in the United States have been captured by the notion that the growth and spread of information technology is creating a revolution in military affairs (RMA) that will transform how militaries go about their business. Much of the vast literature on the RMA focuses on how the US military is leveraging new technologies, organization, and doctrine to transform itself for warfare in the information age. Less attention has been devoted to how other militaries are attempting to adopt and adapt the innovations the United States is currently developing.

We know from historical research on military innovation that transformation leaders do not frequently monopolize “their” transformations for long; that followers often surpass leaders; and that leadership in effecting a military transformation is no guarantee of victory. Accordingly, dynamics outside of the US will be critical to determining the future of the current RMA.

This study builds upon theoretical and historical insights about military diffusion to explore how the current RMA is unfolding in the Asia-Pacific region. The project’s contributors, a group of respected scholars of Asian security affairs, explore the diffusion of new war fighting approaches to Asia from abroad and the unique process of transformation occurring within Asian national military establishments. The project examines how five Asian militaries – Australia, China, Japan, Taiwan, and Singapore – are exploiting the information revolution. These cases display variation in the extent and nature of their exploitation of the emerging RMA. While Asian militaries have paid close attention to U.S. debates on transformation, each has begun to develop its own, unique approach to information-age warfare. Each also faces considerable barriers to exploiting the emerging RMA. This project reveals a diversity of attitudes toward the emerging RMA in Asia. This divergence in military technology, doctrine, and organization is likely to continue until a convincing battlefield demonstration establishes a consensus “model” for the region.

## **Approach**

This study examines case studies of China, Japan, Taiwan, Singapore, and Australia to assess how the information revolution in military affairs is unfolding in the Asia-Pacific region. All of the countries are of interest to the United States and their military decisions will have a significant impact on security in the Asia-Pacific region. Beyond being of

intrinsic interest to the policy community, the cases display variation along several dimensions, which makes them theoretically interesting: their relationship to the United States (from close ally to potential adversary); their motivations to adopt RMA innovations (from interoperability with the US to countering US capabilities); and the factors that affect their capacity to integrate RMA innovations.

The research design follows the methodology of “diffusion diagnostics,” which identifies motives for transformation, the models that are likely to be targets of adoption, factors that enable and constrain diffusion and transformation, and the range of indigenous patterns of adaptation. Based on these four diagnostic tasks, specific questions were crafted to guide the writing of the cases. Common concepts and questions informed by policy relevant concerns ensure the papers relate to one another and increase the chances of producing findings that help bridge the gap between academic research and the needs of the community of policy practitioners.

## **Outline and Paper Summaries**

### **Chapter 1: The Information Revolution in Military Affairs: Prospects for Asia**

EMILY O. GOLDMAN, *University of California, Davis*

This introduction provides an overview of the research questions guiding the study. It reviews two approaches to understanding military diffusion and provides a review of the theoretical and empirical literature on military diffusion and transformation, summarizing what we know about the drivers, enablers and inhibitors of diffusion. The review includes some discussions of empirical research on China with an eye toward comparing what we know from historical research on military diffusion with what analysts have concluded from the contemporary record. The introduction concludes with a summary of the key RMA enablers and barriers that will be critical factors in shaping the speed and depth of transformation in the Asia-Pacific region.

### **Chapter 2: The Strategic Relevance of the Revolution in Military Affairs to Australia**

PAUL DIBB, *Head, Strategic and Defense Studies Center, Australian National University*

This paper by Paul Dobb, Australia’s leading defense intellectual and practitioner (former Deputy Secretary for Strategy in Intelligence in Australia’s Department of Defense and Director of the Joint Intelligence Organization) examines the debate over the Australian RMA—the knowledge edge—and how it relates to the American RMA. It analyzes Australia’s future strategic environment and regional technological trends to determine the relevance of the knowledge edge, the

intensity of military operations that Australia will credibly face, and the operational and organizational changes that will be required to make the knowledge edge effective. Professor Dibb concludes that Australia will face difficulties forging ahead in the high-technology aspects of the RMA due to the small size of the ADF and Australia's limited technological base, and will struggle to be interoperable with the United States.

### **Chapter 3: Seeking the Knowledge Edge: The Revolution in Military Affairs and its Implications for Australia**

MICHAEL EVANS, *Director, Australian Land Warfare Studies Centre*

Dr. Evans, Australia's most widely published expert on the RMA, examines how RMA thinking became institutionalized in Australian strategic thought and how an indigenous concept of an information-based military revolution developed. He assesses the major institutional challenges confronting Australia's quest to redesign its armed forces and concludes that the ability to leverage new technologies effectively are dependent upon the nation's institutional values and its political and strategic context. Australia's search for a "knowledge edge" yields broad lessons that are applicable to other middle powers that choose to pursue military modernisation within the parameters of limited financial budgets.

### **Chapter 4: All the Way with the RMA? The Maginot Line in the Mind of Australian Strategic Planners**

ADAM COBB, *Director [Stratwar.com](http://Stratwar.com)*

According to Dr. Cobb, the military effectiveness of the Australian Defense Forces (ADF) will rapidly decline at a time when Australia's security could come under serious threat for the first time since WWII. Much hope has been placed on the RMA as the silver bullet that will solve many of Australia's problems, but Dr. Cobb is skeptical. He concludes that Australia is open to *both* asymmetric attack and conventional attack, and current plans for an RMA force have failed to reduce vulnerability to either of these. In particular, the Australian obsession with a purely technological interpretation of the RMA is seriously flawed.

### **Chapter 5: The Revolution in Military Affairs and Security of Japan**

SUGIO TAKAHASHI, *Research Associate, The National Institute for Defense Studies, Japan*

Sugio Takahashi, a researcher at Japan's premier strategic studies research institution, presents an overview of the RMA debate in Japan and the status of Japan's transformation efforts. Although the strategic condition of Japan differs greatly from that of the U.S., the RMA does make sense for Japanese security given societal sensitivity to casualties, Japan's technological capabilities, the importance of the alliance with the U.S., and demographic trends. Takahashi argues that Japan must seek its own unique path of transformation and advocates a "Moderate RMA" whereby Japan provides logistical support for U.S. forces in regional contingencies. Japan's Self Defense Forces (SDF) must make its priority the creation of a logistic support system that is interoperable with the U.S. to ensure that U.S.-Japan alliance does not erode. The employment of long range precision guided munitions and stealth aircraft are contrary to Japan's defense strategy, ensuring that the character of Japan's RMA will diverge in important ways from the American RMA.

## **Chapter 6: Taiwan and the RMA**

JAMES MULVENON, *RAND Corporation*

An enormous amount of research has been conducted on the Chinese RMA but little attention has been given to RMA trends in Taiwan. Dr. Mulvenon, one of the leading U.S. security experts on Taiwan, examines the technological base and military policies of Taiwan in order to assess its prospects for military modernization. Taiwan has many technological and economic precursors to support transformation but political and bureaucratic constraints have impeded a full exploitation of this potential capability. Driven by the threat from mainland China to its vulnerable information infrastructure, Taiwan has begun to implement an RMA and these efforts are bolstered by the island's advanced information technology sector, and the demographic benefits of an information-savvy population. Yet the RMA in Taiwan continues to suffer from opposition from status quo-oriented bureaucracies and the island's diplomatic isolation. The US-Taiwan military relationship may be the greatest hope for overcoming these obstacles.

## **Chapter 7: Taiwan: From Integrated Missile Defense to RMA?**

ARTHUR DING, *Associate Research Fellow, Institute of International Relations, National Chengchi University, Taipei*

Dr. Ding presents a more skeptical view of Taiwan's RMA arguing that Taiwan has not been proactive or visionary and the military has only reluctantly accepted the RMA idea. Taiwan lacks the capacity to conduct defense assessment and long-range planning. Traditional defense training emphasizes rigid discipline over innovation which severely limits the vision of defense planners. There is no innovation in Taiwan's military so it is difficult to imagine how Taiwan's military can proceed to undertake the RMA. The key factors forestalling implementation

of the RMA include isolated diplomatic status, lack of sufficient military exchange with western countries to gain first-hand experience in transformation and innovation, inability to develop relevant technology, insufficient attention paid to indigenous development of expertise, and overly rigid discipline.

## **Chapter 8: Learning and Catching Up: China's RMA Initiative**

YOU JI, *School of Politics and International Relations, University of New South Wales*

For Chinese political and military leaders, the RMA promises a new type of war of mass destruction which causes them genuine worry because the countries most vigorously advancing the RMA and most capable of realizing it are potential opponents. For the foreseeable future the People's Liberation Army (PLA) will have limited capabilities to deal with hi-tech wars and face obstacles to achieving breakthroughs in military technology necessary for speeding up its defence modernisation. Nonetheless, because of the gravity of this issue to China's long term national security the PLA has shown enormous enthusiasm for learning and absorbing RMA in its effort to catch up. In the next few decades PLA watchers will see continuing reforms, guided by the RMA concept, and a PLA gradually becoming more open, flexible, professional and hi-tech oriented. However, China's closed socio-political system may doom the long-term potential of the nation. The biggest challenge to China's search for major power status will not be the current backwardness of its technology but the rigidity of its political system.

## **Chapter 9: China's Revolution in Military Affairs : Rattling Mao's Army**

ANDREW NIEN-DZU YANG, *Secretary General, Chinese Council of Advanced Policy Studies, Taipei, Taiwan, ROC*

According to Andrew Yang, one of Taiwan's most prominent defense scholars, the People's Liberation Army (PLA) has been attracted to the concepts and debates surrounding the RMA, but is not embracing or implementing an RMA. Obstacles preventing the PLA from pursuing an RMA are threefold. First, China's overall military strategy is dominated by homeland defense, with sovereignty and territorial integrity as the two primary national defense concerns. Decision-making is dominated by ground force commanders, which poses challenges to "jointness" which is key for the RMA. Second, technological and industrial backwardness has prevented the PLA from leap-frogging technological levels and producing state of the art weapon systems and platforms. Third, poor education and training systems and aging facilities have slowed the process of transforming a conventional army into a technologically adept military organization. These constraints, however, have not prevented the PLA from

pursuing some aspects of the RMA to improve its operational capabilities in fighting and winning a “local war under high-tech conditions.”

## **Chapter 10: Singapore and the Revolution in Military Affairs**

TIM HUXLEY, *University of Hull*

Singapore's military capability is by most measures the most advanced in Southeast Asia and reflects the determination of the People's Action Party government to ensure the city-state's survival in a potentially hostile regional environment. These developments would not have been possible without Singapore's highly-developed economy and well-educated population, and increasingly intense interaction with the armed forces and defense industries of advanced industrial countries. Together, these factors have allowed Singapore to make substantial strides toward participation in the RMA. Though its doctrinal and organizational innovation are less well advanced, Singapore has made substantial progress towards establishing a low cost 'system of systems' which will far outclass the conventional military capabilities of other Southeast Asian states for the next decade.

## **Chapter 11: The Diffusion of the Emerging RMA in Asia: A Preliminary Assessment**

THOMAS G. MAHNKEN, *US Naval War College*

In the concluding essay, Dr. Mahnken describes the paths along which information-age warfare methods are spreading within Asia, summarizes patterns of innovation across the region, examines the drivers of and barriers to pursuing the RMA among the five militaries, and concludes with a series of scenarios describing alternative futures for the region. Professor Mahnken's assessment is that Australia is the farthest along at institutionalizing new ways of war, followed by China. Singapore has made great strides toward fielding an information-age military. Japan and Taiwan's efforts have been much more limited. Overall, this project reveals a diversity of attitudes toward the emerging RMA in Asia and the tendency toward divergence in military technology, doctrine, and organization is likely to continue until some convincing battlefield demonstration reveals the superiority of a “model” for the region.